



**EVINRUDE<sup>®</sup>**  
**Johnson<sup>®</sup>**

## INSTALLATION INSTRUCTIONS

For safety reasons, this kit must be installed by an authorized *Evinrude/Johnson* dealer. These installation instructions contain information that can help prevent personal injury and damage to equipment. Understand the following symbols before proceeding:



### DANGER



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



### WARNING



Indicates a potentially hazardous situation which, if not avoided, **CAN** result in severe injury or death.



### CAUTION



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate personal injury or property damage. It also may be used to alert against unsafe practices.

### TO THE OWNER

The assembly procedures outlined in this sheet should be performed by a skilled technician. If you have questions, see your DEALER. Save these instructions in your owner's kit. This sheet contains information important to the future use and maintenance of your engine.

### TO THE INSTALLER

Give this sheet to the owner. Advise the owner of any special operation or maintenance information contained in the instructions. This kit is designed for specific applicable models only. It is not recommended for units other than those for which it was sold.

## REMOTE CONTROL SELECTION

Before performing these procedures, be sure that the throttle and shift cables are installed in the remote control box according to the remote control manufacturer's instructions.

Remote control styles and applications are described in the *Evinrude/Johnson Genuine Parts and Accessories Catalog*. Plan the installation of all remote controls carefully. Read the outboard's Operator's Guide and the remote control's installation instructions prior to installation.

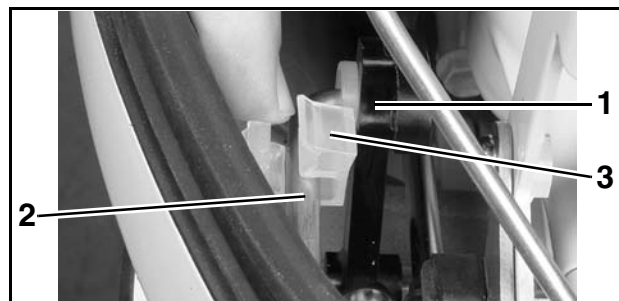
The remote control used must have the following features:

- Start-in-gear prevention
- Emergency stop / key switch
- Shift stroke must conform to outboard's specifications (1.125 to 1.330 in. (28.6 to 33.8 mm) measured between NEUTRAL and FORWARD)
- All wiring must be compatible with Modular Wiring System (MWS) components

The remote control cables must have an SAE fitting on the output (engine) end. Refer to the *Evinrude/Johnson Genuine Parts and Accessories Catalog* for stern drive (SAE output end) cable applications.

## TILLER HANDLE REMOVAL

Unlock the connector, then detach the shaft from the shift rod arm.



1. Shift rod arm
2. Shaft
3. Connector

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Remove the screw.



1. Screw

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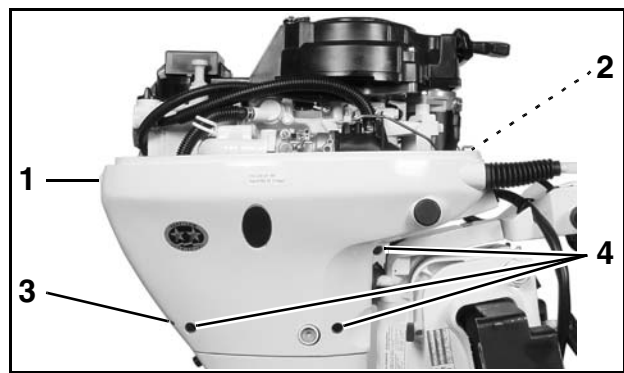
### WARNING



**To prevent engine from starting accidentally, disconnect the battery and the safety lanyard, and remove the propeller.**



Remove lower engine cover screws, rear screw and the two screws inside the engine side covers. Remove the engine covers. Disconnect the water hose.



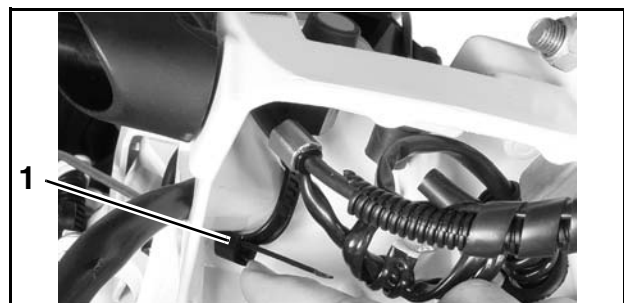
1. Rear screw  
2. Inside screws (two)  
3. Water hose  
4. Lower engine cover screws

Detach the throttle cable from the throttle drum and the cable holder.



1. Throttle cable  
2. Cable holder  
3. Throttle drum

Remove the clamp securing the battery wire harness on the steering bracket by pulling the tab.

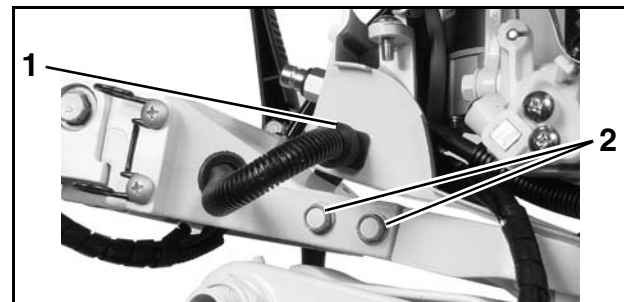


1. Clamp tab

Disconnect the brown, white/red tracer, pink, blue/red tracer, and black wires. (For rope start models, disconnect pink, blue/red tracer, and black wires.)



Pull the wires out of the instrument panel assembly. Remove the two screws, and remove the steering bracket with the tiller handle. Install the rectangular grommet in the hole where the wires were.



1. Wires  
2. Screws

Remove the oil pressure lamp from the steering bracket. Pull the lamp wires from the steering bracket wiring harness.



1. Oil pressure lamp

# INSTALLATION AND ADJUSTMENTS

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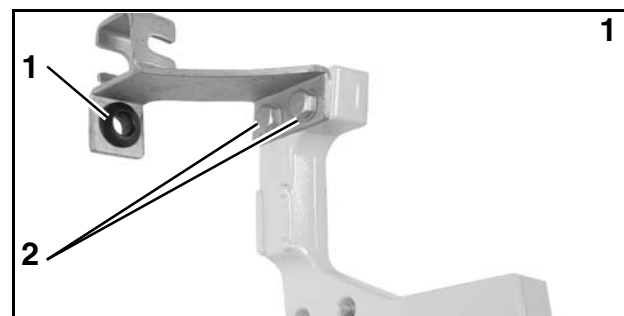
**WARNING**

The remote control used must have the start-in-gear prevention feature. This feature can prevent injuries resulting from unexpected boat movement when the outboard starts.

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## HOLDER AND ATTACHMENT INSTALLATION

Apply *Nut Lock* to the two screws included with the kit. Install the two screws to secure the holder and attachment. Tighten the screws to 7 ft. lbs. (10 N·m). Install the grommet on the attachment.



1. Grommet  
2. Screws

Apply *Nut Lock* to the two original screws. Install the screws and tighten them to 16 ft. lbs. (23 N-m)



1. Screws

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## THROTTLE CABLE INSTALLATION AND ADJUSTMENT

Make sure the remote control lever is in NEUTRAL.

Insert the remote control throttle cable through the grommet on the attachment, and through the original grommet.

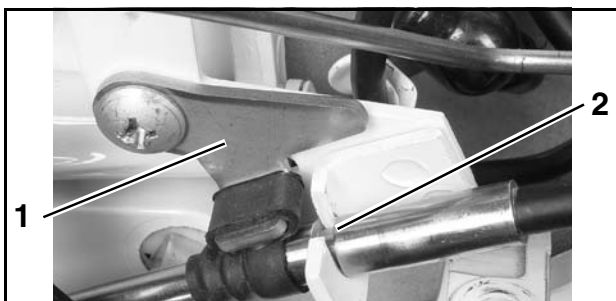


1. Original grommet

2. Attachment grommet

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Secure the remote control throttle cable in the cable holder by fitting the groove on the throttle cable housing into the slot on the cable holder. Replace the throttle cable holder plate and screw.

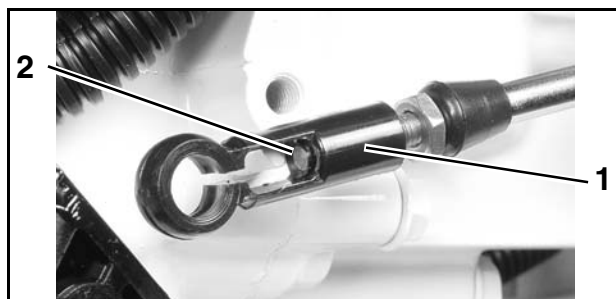


1. Throttle cable holder plate

2. Throttle cable housing groove

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Thread the original cable connector onto the throttle cable until the cable end is flush with the inside surface of the connector.

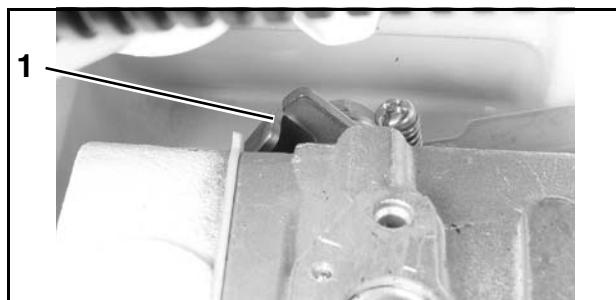


1. Cable connector

2. Cable end

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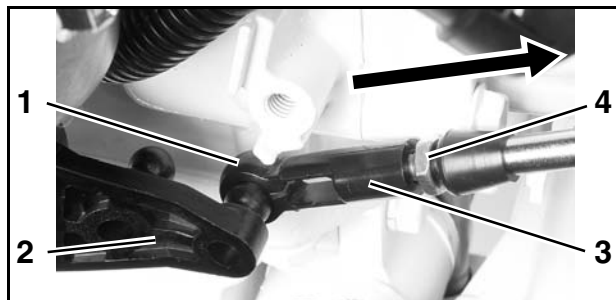
Close the throttle valve fully, making sure that there is a gap in the throttle linkage on the backside of the carburetor.



1. Gap

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Turn the throttle drum counterclockwise until it is closed fully. While pushing the cable end in the direction of the arrow, adjust the cable connector until the center of the connector aligns with the center of the ball pivot on the throttle drum. When aligned, press the cable connector over the ball pivot, then tighten the cable lock nut.



1. Ball pivot

2. Throttle drum

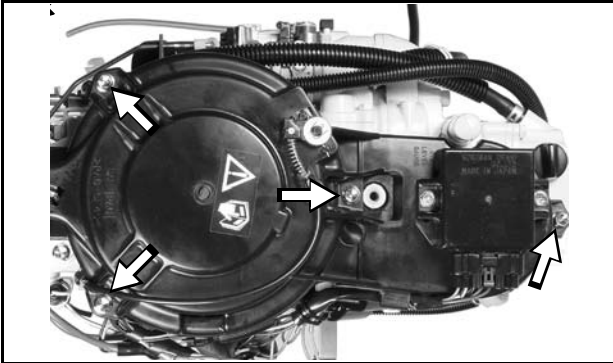
3. Cable connector

4. Cable lock nut

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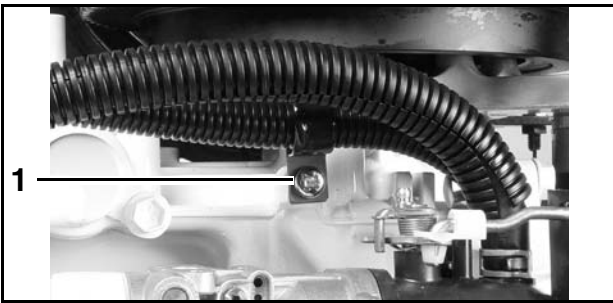
## CHOKE SOLENOID INSTALLATION

Remove the four screws retaining the recoil starter assembly to the powerhead. Remove the recoil starter assembly.



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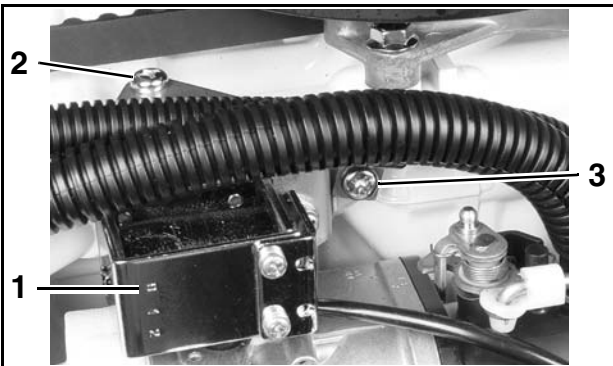
Remove the screw securing the fuel line clamp.



1. Screw

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Install the choke solenoid, using the short screw and long screw supplied with the kit. Be sure the long screw goes through the fuel line clamp before it goes through the solenoid bracket.



1. Choke solenoid  
2. Short screw  
3. Long screw

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Insert the plunger into the solenoid. Lubricate the ball pivot on the carburetor with *Triple Guard Grease*. Snap the connector onto the ball pivot on the carburetor. Replace the recoil starter assembly.

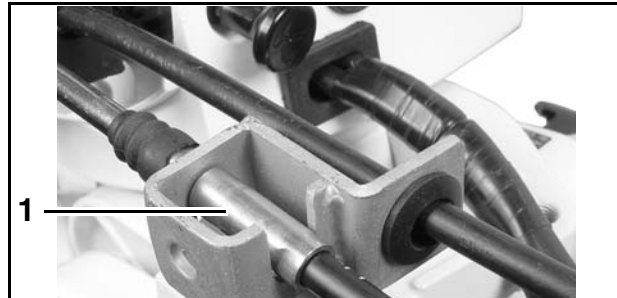


1. Plunger  
2. Ball pivot

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## SHIFT CABLE

Secure the remote control shift cable in the attachment by fitting the groove on the shift cable housing into the slot on the attachment.



1. Shift cable housing

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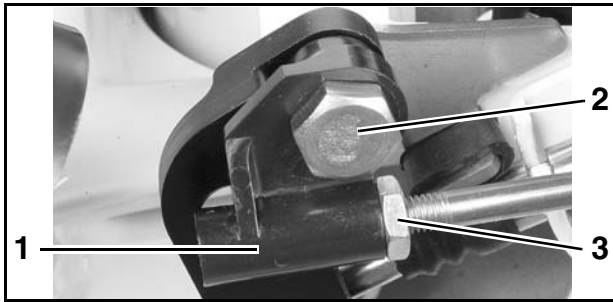
Remove the original shift lever link from the engine side cover and boot. Insert the remote control shift cable through the side cover and boot. Remove the connector from the shift lever.



1. Remote control shift cable  
2. Boot  
3. Connector

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Thread the connector onto the shift cable until the connector aligns with the tapped hole of the shift rod arm. Install the screw through the connector and into the shift rod arm, and tighten it to 22 in. lbs. (2.5 N·m). Tighten the cable lock nut.



1. Connector
2. Screw
3. Cable lock nut

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## OPERATION CHECK

Operate the control lever on the remote control box and verify the following actions:

**SHIFT:** Both forward, reverse, and neutral gear must engage with the same degree of control lever travel.

**THROTTLE:** The throttle must open and close fully.

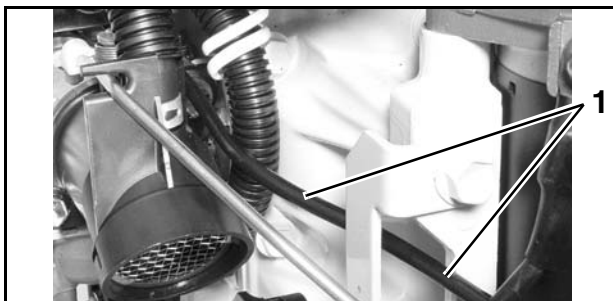


Verify control lever operation

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## ELECTRICAL PARTS INSTALLATION

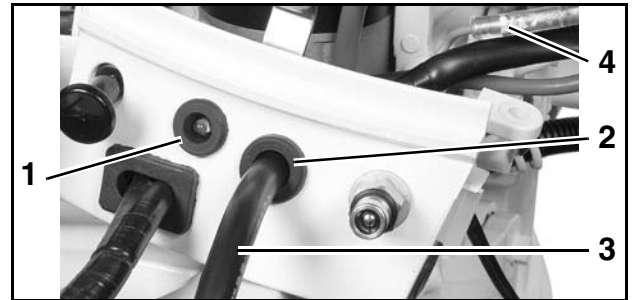
Route the choke solenoid wire as shown to avoid contact with the carburetor's throttle and choke mechanisms.



1. Choke solenoid wire

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Remove the two original grommets, and replace them with the original oil pressure indicator lamp and the long round grommet. Insert the remote control harness through the grommet, with the *Deutsch* connectors on the outside. Make sure the orange wire and connector are on the engine side of the grommet.



1. Oil pressure indicator lamp
2. Long round grommet
3. Remote control harness
4. Orange wire

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Disconnect the blue wire between the CDI unit and the oil pressure switch.



1. Blue wire

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Connect the brown, white/red tracer, pink, blue/red tracer, yellow, blue, and black wires. The blue wire is connected in series between the CDI unit and the oil pressure switch. You must retrieve the yellow wire from the harness leading to the timer base. (For rope start models, connect the pink, blue/red tracer, blue, and black wires. Leave the brown, white/red tracer, and yellow wires disconnected.)

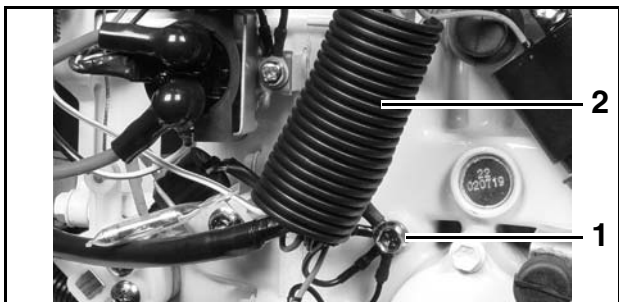


1. Yellow wire
2. Blue wire
3. Ground connections

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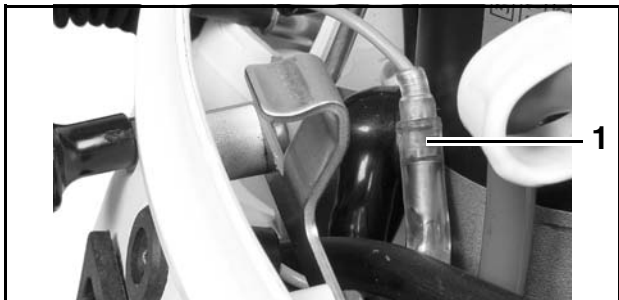
Secure the black (ground) wire terminals on the boss by tightening the screw. Bundle the wires in the two original tubes.



1. Ground wire terminals screw
2. Wire tube

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Connect the orange choke solenoid wire. Be careful to route it so it will not be damaged by the motor cover latch or the manual choke rod.

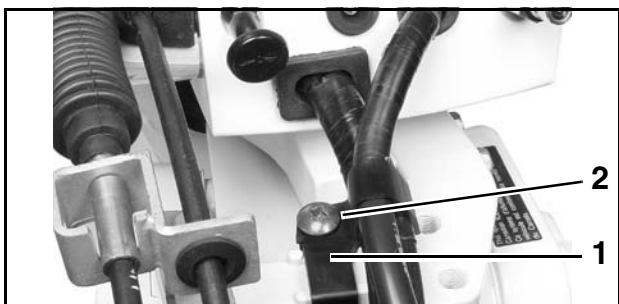


1. Choke solenoid wire

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**IMPORTANT:** For rope start models, the buzzer in the remote control box will not sound when the oil pressure switch activates. The low oil pressure caution can be detected by the oil pressure indicator lamp.

Install the engine side covers and gasket. Attach the clamp onto the holder, over the remote control harness and the battery cable. Install and tighten the retaining screw.

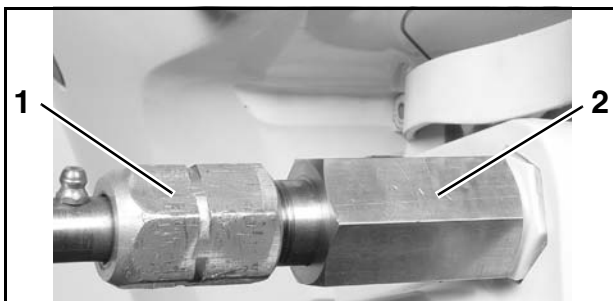


1. Clamp
2. Retaining screw

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## ATTACHMENT AND STEERING CABLE INSTALLATION

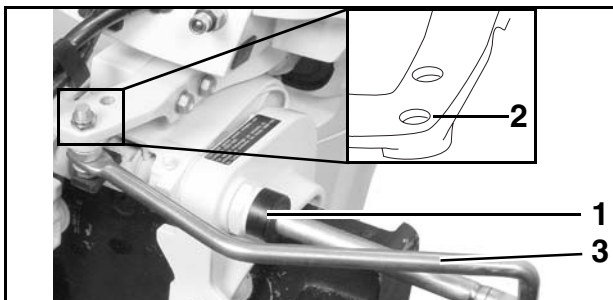
Install the attachment to the clamp bracket. Tighten it to 30 ft. lbs. (42 N·m). Lubricate the steering cable with *Triple Guard* grease. Install the steering cable. Tighten the nut to the torque listed in the steering cable installation instructions.



1. Attachment
2. Nut

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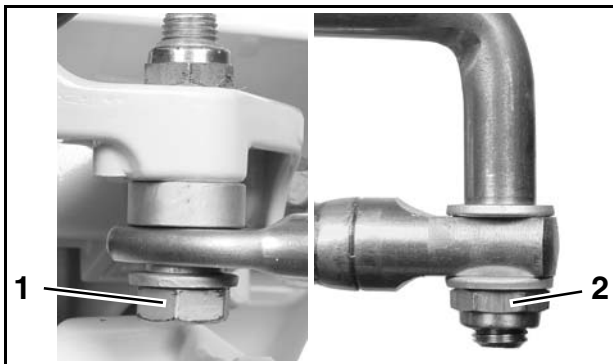
Install the wiper seal on the steering tube. Install the drag link in the outer hole.



1. Wiper seal (P/N 5030840)
2. Outer hole
3. Drag link

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Arrange the screw, nuts, collar and washers as shown. Tighten the steering cable end to 7 ft. lbs. (10 N·m). Tighten the engine end to 24 ft. lbs. (34 N·m).



1. Engine end
2. Steering cable end

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### WARNING



To avoid loss of engine control, thoroughly test the starting, shifting, throttle and steering functions before delivering the boat and outboard to your customer.